PLDN UX Linked Data Challenge – Buying a house challenge

Specific challenge introduction

Buyer of a home

Digitally exploring your new neighborhood to get an impression of the residential climate and all kinds of facilities, experiencing your house and road in picture and sound, possibly with local nature and history, you can prepare yourself to make one of the most important decisions in your life in a much better informed way. This is what is Funda wants to achieve for more than 3 million customers in the Netherlands that are considering the purchase a home.

At present information on Funda, is in most cases limited to non-moving pictures of the interior of a home that is for sale, possibly supplemented by a video. But anyone who wants to be more successful in the rankings of the Funfa search lists, has to add information about the neighborhood and the residents of this neighborhood. The decision to live somewhere is more and more based upon available relevant context and environment information!

The Kadaster currently offers a comprehensive report with home-related information for 26.50 Euros for prospective buyers, which is mostly static data. We expect that this can be done in a better way!

The task of this challenge is to develop an app that transforms the Kadaster report into an interactive Home and Neighborhood experience, which zooms in on the search behavior of the potential buyer in domestic and neighborhood-related information that is of importance to him in the image building and decision-making process on buying a new home.

Available data sets and additional data sources

- Data of municipalities, water, and county government as Open Data available through PDOK, see presentation "Waar komt mijn huis(Where is my home)?" by Bart-Jan de Leuw
  - BRK
  - BAG
  - BGT
  - CBS
  - Open Topo
  - OpenStreetMap
  - Google Maps / Street View
  - Etc.
- Data of Regional Newspapers, local magazines, online community groups on Facebook, Nextdoor, etc.
- Data on the property and the neighborhood from the selling organization (project developer/contractor)
- ...

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Question(s) for which we would like to see (an) answer(s)

Imagine, you are working and living for five years now as a family with two young children in a city, and you are considering a semi-detached house or a house situated at the corner of a street, located in a quiet (outside) area of a city or a medium-sized town not more than 15 km from a town with a train station. (Without having stated this explicitly, you are considering subconsciously about 5 quarters in your current city, and about eight places in the area.)

Links with information within the buying process

An image of the exterior of a new home evokes associations with your preferences, which you can show by clicking on the pictures showing you an image of the inside of the house. If it looks attractive enough after 3 to 5 pictures, your attention goes to the main features of the house: square meters of the (living) area, garden size and location, and price. Are all these features still within the desires and constraints you are looking for then you will look at the most distinctive feature of the house: **location!**

The Funda information gives you the more static options like "on a busy road", "next to a park" or "in a residential area" among others. However you would like to know the answers to questions like:

• What is the composition of the population in the neighborhood? People just like you and your family?
• What facilities are there in your neighborhood? Supermarket, drugstore, bakery, hairdresser, etc.
• How do people experience the neighborhood? (stories of local house owners)
• How safe is your neighborhood? What kind of disturbances of public order and what crimes are taking place and how often?
• What is the turnover of the residents? How often do you get new neighbors?
• How many playgrounds are nearby? And dogs outlet sites?
• What is the average number of hours children play in the street? Till what time?
• What is known about the green environment in the neighborhood (number of trees / hedges / green areas)? And green areas in the vicinity?
• What sports options, facilities and accommodations are availble? Outside, publicly accessible? And inside, commercially?
• How many parking spaces are available for residents and visitors and what is the parking policy? (free/paid parking, paid parking hours and tariff)

We would like to see an attractive and intuitive user interface that guides a user step-by-step through a house search process and suggests and offers data that is relevant at each step. Given the fact that location and visual attractiveness of a house and neighborhood is in almost all cases one of the most-distinctive criteria in a search we would also like to see a map-based applications that is combined with attractive visuals from different sources.

Possible approaches and tools

Please convert data to linked data when required, but also (re)use Linked Data that is already available in e.g. the testbed of Geonovum, on the Almere server or that can be retrieved via the 2-step process that Wouter Beek will share in his YASGUI introduction.

We expect a map-based application that helps satisfying the requirements that are stated in the specific challenge introduction. You are free to use any tools and software to win the prize.

Contact information

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For this specific challenge:

TBD